

## What is claimed is:

1. A Streamlined Data Viewing System (SDVS) that provides direct access to every data object while viewing any data object on a Visual Display Unit (VDU) via a client process, each data object resulting from searching an Information Location Mechanism (ILM), each data object having a plurality of data elements, each data element having some or no contents, the SDVS comprising:
  - an **instruction port** configured to receive a target identifier indicating the target data object;
  - a **list port** configured to receive a list of data object identifiers;
  - a **data port** configured to receive the target data object;
  - an **output port** configured to send the data object and a navigation control to the client process and/or to the mechanism that invoked the SDVS; and
  - a **controller** configured to:
    - ◆ receive the target identifier from the instruction port,
    - ◆ receive the list from the list port,
    - ◆ receive the target data object from the data port,
    - ◆ create a navigation control with one navigation element for each data object in the list, with the exception of the target data object, wherein the navigation control uses less display area than the display area occupied by the aggregate of the title of every data object in the list, and
    - ◆ send the data object and the navigation control to the output port;

thereby saving a user time by enabling the user to access any data object that met their search criteria without returning each time to the result list that is typically displayed as the result of a search.

2. The SDVS recited in claim 1 wherein the instruction port, list port, data port, and/or output port is/are coupled to an HTTP Web server, or coupled to a computer-readable media, or configured to communicate via a standard electronic messaging protocol.
3. The SDVS recited in claim 1 wherein the data port is coupled to a document, a database, a database management system, a search engine supporting full-text search, a search engine supporting fielded search, a search engine supporting regular expressions and/or other patterns, and/or an iterative search engine.
4. The SDVS recited in claim 1 wherein each data object is comprised of a database record, a document, or some other grouping of associated data elements.
5. The SDVS recited in claim 1 wherein each data element is comprised of a database field, tagged data including HTML, XML, or SGML, meta data, and/or a document.
6. The SDVS recited in claim 1 wherein each data element is part of a data object, the data object having at least one data unit of employment information.
7. The SDVS recited in claim 1 wherein the controller is configured to create a navigation element for the target data object.
8. The SDVS recited in claim 7 wherein the navigation element for the target data object has a different appearance than the navigation elements for other data objects.
9. The SDVS recited in claim 8 wherein the appearance is made visually distinct by changing the geometry, layout, text font or typeface, text size, text style, text color and/or background color of part or all of the navigation element for the target data object.

10. The SDVS recited in claim 7 wherein the navigation element for the target data object is not a hypertext link.

11. The SDVS recited in claim 1 wherein the controller is configured to add an additional navigation element linked to the data object prior to the target data object, if any.

12. The SDVS recited in claim 11 wherein the additional navigation element is a left-facing or up-facing arrow, rendered textually with at least one "<" character or rendered graphically.

13. The SDVS recited in claim 11 wherein the additional navigation element for the target data object comprises a text label such as "PREV" or "PREVIOUS," or similar word or phrase in English or other language.

14. The SDVS recited in claim 1 wherein the controller is configured to add an additional navigation element linked to the data object following the target data object, if any.

15. The SDVS recited in claim 14 wherein the additional navigation element is a right-facing or down-facing arrow, rendered textually with at least one ">" character or rendered graphically.

16. The SDVS recited in claim 14 wherein the additional navigation element for the target data object comprises a text label such as "NEXT," or similar word or phrase in English or other language.

17. The SDVS recited in claim 1 wherein each navigation element is configured such that the client process will display, on the VDU, additional information about the associated data object when a user moves a UD over the navigation element.

18. The SDVS recited in claim 17 wherein the additional information is the title of the target data object.

19. The SDVS recited in claim 1 wherein each navigation element can be activated by a user with a single action using a UD.

20. The SDVS recited in claim 19 wherein the single action is a click or tap.

21. The SDVS recited in claim 1 wherein the single action is press-drag-release.

22. The SDVS recited in claim 1 wherein the navigation elements are arranged horizontally.

23. The SDVS recited in claim 1 wherein the navigation elements are arranged vertically.

24. The SDVS recited in claim 1 wherein the target identifier is a data element identifier.

25. The SDVS recited in claim 1 wherein the target identifier is an index into the list.

26. The SDVS recited in claim 1, further including a **list identifier port** configured to receive a list identifier, and wherein the list port is coupled to storage, and wherein the controller is configured to get the identified list from storage via the list port.

27. The SDVS recited in claim 26 wherein the list identifier port and the instruction port are the same port, and wherein the controller is configured to extract the target identifier and the list identifier from the instruction port.

28. The SDVS recited in claim 1, further including:

- a **data cache** configured to store a copy of zero or more data objects;
- a **cache manager** configured to:
  - ◆ check if the target data object is already stored in the data cache;
  - ◆ if not, get a copy of the data object via the data port and store it in the data cache;
  - ◆ return a copy of the data object from the data cache to the controller;

and wherein the controller is configured to receive the data objects from the cache manager and/or from the data port.

29. A search system comprising:

- a search port configured to receive search criteria;
- an Information Location Mechanism (ILM) configured to locate zero or more data objects that match the received search criteria;
- a formatting engine configured to format a result list comprising a subset of information from each matching data object;
- a client process and VDU configured to display the result list, the data object and the navigation control;
- an SDVS as recited in claim 1 wherein the data port is coupled to the ILM and the output port is coupled to the client process which displays on the VDU.

30. The search system recited in claim 29 wherein the controller of the SDVS creates a formatted representation of the navigation control employing a markup language including HTML, XML or SGML.

31. The search system recited in claim 29 wherein the contents of at least one data element of at least one data object include employment information.

32. The search system recited in claim 29, further including:

- a sort port configured to receive sort criteria;
- an Information Sorting Mechanism (ISM) coupled between the ILM and the formatting engine; the ISM being configured to receive the sort criteria in a predetermined syntax, receive a plurality of data objects from the ILM, sort the

data objects according to the sort criteria, and forward the sorted data objects to the VDU.

33. A streamlined data viewing method that provides direct access to every data object while viewing any data object on a Visual Display Unit (VDU) via a client process, each data object resulting from searching an Information Location Mechanism (ILM), each data object having a plurality of data elements, each data element having some or no contents, the method comprising:

- receiving a target identifier indicating the target data object;
- receiving the list of data object identifiers;
- receiving the target data object;
- creating a navigation control with one navigation element for each data object in the list of data object identifiers, with the exception of the target data object, wherein the navigation control uses less display area than the display area occupied by the aggregate of the title of every data object in the list; and,
- sending the data object and the navigation control to the client process and/or to the mechanism that invoked the method;

thereby saving a user time by enabling the user to access any data object that met their search criteria without returning each time to the result list that is typically displayed as the result of a search.

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